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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,698	02/27/2002	Milind M. Kulkarni	CISCP271/5126	6296
22434	7590	07/17/2006	EXAMINER	
BEYER WEAVER & THOMAS, LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			SALAD, ABDULLAHI ELMH	
			ART UNIT	PAPER NUMBER
			2157	
DATE MAILED: 07/17/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/084,698

Applicant(s)

KULKARNI ET AL.

Examiner

Salad E. Abdullahi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 and 44-76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 44-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/23/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

**Response to Amendment**

1. The amendment filed on 4/7/2006 has been received and made of record.
2. Applicant's argument filed 4/7/2006 with respect to claims 1-28 and 44-76 have been fully considered but are moot in view of new ground of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
5. Claims 1-9, 12-28 and 44-76 are rejected under 35 U.S.C. 102(e) as being unpatentable over Warriar et al., U.S. Patent No. 6,707,809[hereinafter Warriar] in view of Haverinen, Henry U.S. Patent a Application Publication No. 2001/0021175 A1 [hereinafter Haverinen].

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As per claim 1, Warriar discloses in a first one of a plurality of Home Agents supporting Mobile IP, a method of processing a registration request from a Mobile Node that has roamed to a Foreign Agent supporting Mobile IP, comprising:

receiving a registration request associated with the plurality of Home Agents((see fig. 3, steps 52, 54, and col. 6, line 23-42);

sending the registration request to a second one of the plurality of Home Agents such that the second one of the plurality of Home Agents creates a binding between the Mobile Node and the Foreign Agent (see fig. 3 and step 56 and 60 col. 6, line 23-54);

receiving a registration reply from the second one of the plurality of Home Agents (see fig. 3 and step 62 and col. 6, line 23-54);

Warriar is silent regarding:

receiving the registration request addressed to a virtual Home Agent address;

creating a temporary binding between the Mobile Node and the Foreign Agent;

updating the temporary binding to create a permanent binding when the registration reply is received from the second one of the plurality of Home;

Haverinen, discloses a load balancing in telecommunications system supporting mobile IP including receiving a registration request addressed to a virtual Home Agent address receiving the registration request addressed to a virtual Home Agent address(see paragraph 0021-0023), creating a temporary binding between the Mobile Node and the Foreign Agent (see paragraph 0021-0023), updating the temporary binding to create a permanent binding when the registration reply is received from the second one of the plurality of Home(see paragraph 0021-0023). Therefore, it would have been obvious to

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one having ordinary skill in the art at the time of the invention to incorporate the teachings of Haverinen, thus the load of the primary home agents can be flexibly balanced, even on the move, even though the mobile nodes were already registered[see paragraph 0009].

As per claim 2, Warriier discloses the method as recited in claim 1, wherein the temporary binding comprises an identifier associated with the Mobile Node, an IP address associated with the Foreign Agent, and an IP address associated with the second one of the plurality of Home Agents (see paragraph 0032).

As per claim 3-9, Warriier discloses the method as recited in claim 1, wherein the permanent binding comprises an identifier associated with the Mobile Node, an IP address associated with the Foreign Agent, an IP address associated with the second one of the plurality of Home Agents, and a registration (see col. 6, lines 43-54).

As per claims 12-14, Haverinen discloses he method as recited in claim 1, wherein the registration request specifies a destination IP address as the virtual Home Agent address (see paragraph 0021-0023).

As per claims 15-16, Haverinen discloses the method as recited in claim 1, further comprising: advertising a virtual network associated with the virtual Home Agent address, wherein advertising comprises sending a routing table update (see paragraph 0021-0023).

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As per claims 17, and 21-25 Haverinen discloses the method as recited in claim 1, further comprising: sending at least one of Home Agent health and load information associated with the first one of the plurality of Home Agents to one or more of the plurality of Home Agents (see paragraph 0021-0023).

As per claims 18-20, Haverinen discloses the method as recited in claim 15, further comprising: receiving an advertisement from one of the plurality of Home Agents, the advertisement advertising the virtual network associated with the virtual Home Agent address (see paragraph 0021-0023).

As per claims 26-27, Haverinen discloses the method as recited in claim 1, further comprising: sending one or more bindings to one or more backup Home Agents, the one or more bindings being associated with one or more of the plurality of Home Agents (see paragraph 0021-0023).

As per claim 28 Haverinen discloses the method as recited in claim 1, when the registration request is received, searching for a binding for the Mobile Node(see paragraph 0027-0028).

6. Claims 10-11 are rejected under 35 U.S.C. 102(e) as being unpatentable over Warriar and Haverinen, and further in view of Johansson U.S. Patent a Application Publication No. 2002/0080752[hereinafter Johansson].

As per claims 10-11, Warriar and Haverinen discloses substantial features of the claimed as discussed above with respect to claim 1

Warriar and Haverinen are silent regarding: wherein the registration request specifies a destination MAC address equal to a MAC address assigned to the second one of the plurality of Home Agents.

Johansson discloses mobile data communications wherein the registration request specifies a destination MAC address equal to a MAC address assigned to the second one of the plurality of Home Agents (see paragraph 0086). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention presented with teaching of Warriar and Haverinen to incorporate the teachings Johansson in order to separate traffic destined for mobile node(see paragraph 0086).

7. As per claims 44-76, the claims include features analogous with features in claims 1-28 and 44-46 discussed above thus claims 44-76 are rejected same rational as claims 1-28 and 44-76.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salad E. Abdullahi whose telephone number is 571-272-4009. The examiner can normally be reached on 8:30 - 5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.



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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abdullahi Salad  
7/9/2006

ABDULLAH SALAD  
PRIMARY EXAMINER